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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,104	03/24/2005	Takeshi Konno	CSP-110-A	1957
21828	7590	11/17/2006	EXAMINER	
CARRIER BLACKMAN AND ASSOCIATES			PHAM, LAM P	
24101 NOVI ROAD			ART UNIT	
SUITE 100			PAPER NUMBER	
NOVI, MI 48375			2612	

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/529,104

Applicant(s)

KONNO, TAKESHI

Examiner

Lam P. Pham

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 rejected under 35 U.S.C. 102(b) as being anticipated by **Kurozu et al.** (US 5157389).

Re claim 1, Kurozu disclose an electronic key system for a vehicle including a controller (CM, FM and OCM) mounted on the vehicle and a portable transceiver (PCM, entry card 21) for transmitting an acknowledgement signal (cipher code signal) based on receipt of a request signal (interrogation signal) from the controller, the controller comprising:

first means (transmitter 37 of OCM) for outputting a request signal to the portable transceiver in response to an ON operation of a start switch (KRS) for the vehicle;

second means (receiver 35) for detecting an acknowledgement signal from the portable transceiver based on the request the signal; and

third means (buzzer 46) for outputting a warning when the acknowledgement signal is not detected in the second means, regardless of output of the request signal from the first means as seen in Figures 1-3; col. 2, lines 35 to col. 4, lines 65; col. 6, lines 1-44.

Re claim 2, Kurozu disclose the controller further comprises fourth means (SREM1) for outputting a request signal to the portable transceiver based on activation

of the controller (via KRS input), and fifth means (steering lock unit 49) for releasing a locked state (steering lock) of the vehicle when an acknowledgement signal from the portable transceiver is detected in the second means based on the request signal from the fourth means as seen in Figures 1-3; col. 6, lines 8-44.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Kurozu et al. in view of **Yoshida** et al. (US 5343077).

Re claim 3, Kurozu disclose an electronic key system for a vehicle including a controller (CM, FM and OCM) mounted on the vehicle and a portable transceiver (PCM entry card 21) for transmitting an acknowledgement (cipher code signal) signal based on receipt of a request (interrogation) signal from the controller, the controller comprising:

first means (transmitter 37) for outputting a request signal to the portable transceiver for a predetermined period of time during interrogation;

second means (receiver 35) for detecting an transceiver acknowledgement signal based on the request from the portable signal; and

third means (buzzer 46) for outputting a warning when the acknowledgement signal is not detected in the second means as seen in Figures 1-3; col. 2, lines 35 to col. 4, lines 65; col. 6, lines 1-44.

However, Kurozu fail to disclose outputting the request signal to the portable transceiver every fixed period of time.

Yoshida in same field of endeavor teach of an electronic key system comprising a transceiver unit (106 of vehicle controller) transmitting request signal at a predetermined frequency on every predetermined time to the transceiver (key 107) for providing 2-way communication in order to control functions of the vehicle, as seen in Figure 10; col. 8, lines 14-62.

In view of Yoshida teaching, it would have been obvious to one of ordinary skilled in the art to have the first means outputting the request signal every fixed period of time in order to provide bidirectional communication between the vehicle controller and the electronic key to assure that the electronic key is not missing from predetermined area of the vehicle.

Re claim 4, Kurozu and Yoshida both fail to specifically disclose the output period for the request signal of the first means is in a range from 10 to 100 seconds.

However, one of ordinary skilled in the art to recognize that the output period for the request signal can have any range from 1 second to 100 seconds as a matter of desired choice that the interrogation is necessitated. Thus, it would have been obvious to one of ordinary skilled in the art to have the output period range from 10 to 100 seconds as a matter of designed choice.

Re claim 5, Kurozu disclose the third means counts periods in which the acknowledgement signal is not detected, and outputs warning at a point in time when the count becomes greater than a specified value; the interrogation is carried out for a predetermined period of time and if the controller could not detect the response signal in response to a fixed number of interrogation signals within the predetermined period of time, this fix number has at least a zero value, the warning is generated as seen in col. 6, lines 4-20.

Re claim 6, Kurozu disclose the controller further comprises fourth means (SREM1) for outputting a request signal to the portable transceiver based on activation of the controller (via KRS input), and fifth means (steering lock unit 49) for releasing a locked state (steering lock) of the vehicle when an acknowledgement signal from the portable transceiver is detected in the second means based on the request signal from the fourth means as seen in Figures 1-3; col. 6, lines 8-44.

Re claim 7, Kurozu and Yoshida combinedly teach an electronic key system for a vehicle including a controller (CM, FM and OCM) mounted on the vehicle and a portable transceiver (PCM, entry card 21) for transmitting an acknowledgement signal (cipher code signal) based on receipt of a request signal (interrogation signal) from the controller, the controller comprising:

first means (transmitter 37 of OCM) for outputting a request signal to the portable transceiver every fixed period of time; see claim 3 for explanation.

second means (receiver 35) for detecting an acknowledgement signal from the portable transceiver based on the request the signal;

third means (buzzer 46) for outputting a warning when the acknowledgement signal is not detected in the second means;

fourth means (transmitter 37 of OCM) for outputting a request signal to the portable transceiver in response to an ON operation of a start switch (KRS) for the vehicle;

fifth means (buzzer 46) for outputting a warning when the acknowledgement signal is not detected in the second means, regardless of output of the request signal from the first means as seen in Figures 1-3; col. 2, lines 35 to col. 4, lines 65; col. 6, lines 1-44 of Kurozu and Figure 10; col. 8, lines 14-62 of Yoshida.

Re claim 8, referring to claim 4 for explanation.

Re claim 9, referring to claim 5 for explanation.

Re claim 10, referring to claim 6 for explanation.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kurozu et al. (US 5293160) disclose a keyless vehicle lock system.

Proefke et al. (US 6386447) disclose a smart card with card in vehicle warning.

Kumano (US 6621406) disclose a keyless entry system for vehicle.

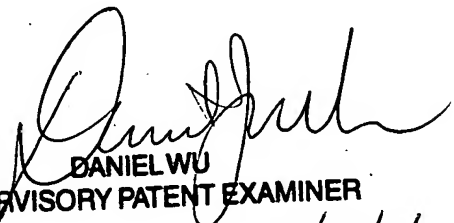
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lam P. Pham whose telephone number is 571-272-2977. The examiner can normally be reached on 10AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lam P Pham  
Examiner  
Art Unit 2612

October 27, 2006.

  
DANIEL WU  
SUPERVISORY PATENT EXAMINER  
11/13/06